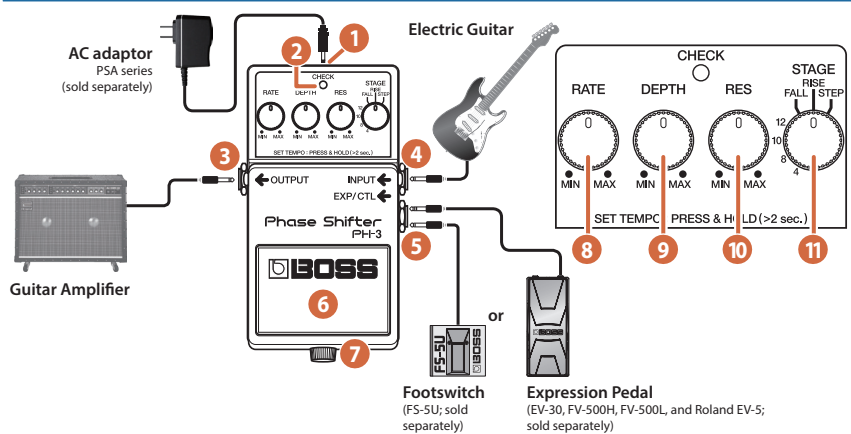


Before using this unit, carefully read the sections entitled: “USING THE UNIT SAFELY” and “IMPORTANT NOTES” (supplied on a separate sheet). After reading, keep the document(s) where it will be available for immediate reference.

Panel Descriptions



Name	Explanation
1 DC IN jack	Accepts connection of an AC Adaptor (PSA series; sold separately). By using an AC Adaptor, you can play without being concerned about how much battery power you have left. * We recommend that you keep batteries installed in the unit even though you'll be powering it with the AC adaptor. That way, you'll be able to continue a performance even if the cord of the AC adaptor gets accidentally disconnected from the unit. * Use only the specified AC adaptor (PSA-series). * If the AC adaptor is connected while power is on, the power supply is drawn from the AC adaptor.
2 CHECK indicator	Combination indicator that shows the effect's on/off status, tempo (in Tempo mode), and Battery Check function. The indicator is lit when the effect is on, thereby allowing you to check whether the effect is on or off. The indicator lights when an effect is ON. * If the indicator dims when the effect is on or when the tempo is being displayed, it means that the battery is running out of reserve; when this occurs, replace with fresh batteries. ➔ “Changing the Battery”
3 OUTPUT jack	Connect an amplifier to this jack.
4 INPUT jack	This jack accepts input signals coming from a guitar, some other musical instrument, or another effects unit. * The INPUT jack also functions as a power switch. When a plug is inserted into the INPUT jack, the power will be turned on. When the plug is pulled out, the power will be turned off. When you are not using the unit, pull the plug out of the INPUT jack.

Name	Explanation														
5 EXP/CTL jack	Accepts connection of an expression pedal (EV-30, Roland EV-5; sold separately) or momentary- type foot switch (FS-5U; sold separately). Use the EV-30 or EV-5 to change the RATE continuously. Setting tempos is easy with the FS-5U. ➔ “Using the EXP/CTL Jack” * Use only the specified expression pedal (EV-30, FV-500H, FV-500L, and Roland EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.														
6 Pedal Switch	Used for switching effects on/off, and for inputting the tempo. When the effect is on, be sure to start any changes with the filter at the lowest setting. ➔ “Setting the Tempo with the PH-3's Pedal Switch”														
7 Thumbscrew	When this screw is loosened, the pedal will open, allowing you to change the battery. ➔ “Changing the Battery”														
8 [RATE] knob	Adjusts the speed at which the filter changes. When set to MIN, the filter remains off.														
9 [DEPTH] knob	Adjusts the depth of the filter change. The filter effect stops when this is set to MIN with the STAGE switch set to anything besides FALL or RISE.														
10 [RES] knob	Adjusts the strength of the filter effect. The effect sound becomes stronger the further the knob is turned clockwise. * Raising the RES setting (turning it clockwise) makes it easier for the sound to become distorted. If it appears that the sound is becoming distorted, try lowering the RES setting.														
11 [STAGE] switch	Selects the number of phase steps and the phase type. The higher the number, the more depth the phaser effect has. <table><tr><td>4</td><td>4-stage phaser; a light, vintage phaser effect with a classic feel.</td></tr><tr><td>8</td><td>8-stage phaser that gives a balanced phaser sound.</td></tr><tr><td>10</td><td>10-stage phaser providing a deep phaser effect.</td></tr><tr><td>12</td><td>12-stage phaser, with two sixstage phasers connected in series for a powerful phaser effect.</td></tr><tr><td>FALL</td><td>Phase effect featuring a continuously falling sensation.</td></tr><tr><td>RISE</td><td>Phase effect that imparts a continuously rising sensation.</td></tr><tr><td>STEP</td><td>Phase effect whereby filter modifications occur in a non-consecutive manner. This can provide some really unique, illusional effects.</td></tr></table>	4	4-stage phaser; a light, vintage phaser effect with a classic feel.	8	8-stage phaser that gives a balanced phaser sound.	10	10-stage phaser providing a deep phaser effect.	12	12-stage phaser, with two sixstage phasers connected in series for a powerful phaser effect.	FALL	Phase effect featuring a continuously falling sensation.	RISE	Phase effect that imparts a continuously rising sensation.	STEP	Phase effect whereby filter modifications occur in a non-consecutive manner. This can provide some really unique, illusional effects.
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Precautions When Connecting

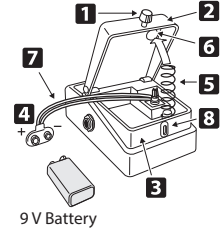
- To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
- Once you've gotten hooked up correctly, be sure to observe the following order when switching on the power to your equipment. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.
When powering up: Turn on the power to your guitar amp last.
When powering down: Turn off the power to your guitar amp first.
- Before turning the unit on/off, always be sure to turn the volume down. Even when the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Use of Battery

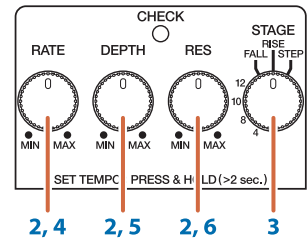
- A battery was installed in the unit before it left the factory. The life of this battery may be limited, however, since its primary purpose was to enable testing. If operating this unit on batteries, please use alkaline batteries.
- If you handle batteries improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in “USING THE UNIT SAFELY” and “IMPORTANT NOTES” (supplied on a separate sheet).

Changing the Battery

- Hold down the pedal and loosen the thumbscrew 1, then open the pedal 2 upward.
* The pedal can be opened without detaching the thumbscrew completely.
- Remove the old battery from the battery housing 3, and remove the battery snap 4 connected to it.
- Connect the battery snap to the new battery, and place the battery inside the battery housing.
* Be sure to carefully observe the battery's polarity (+ versus -).
- Slip the coil spring 5 onto the spring base 6 on the back of the pedal, and then close the pedal.
* Carefully avoid getting the battery snap cord 7 caught in the pedal, coil spring, and battery housing.
- Insert the thumbscrew into the guide bush hole 8 and tighten it securely.



Operating the Unit



- When you have finished making the connections, press the pedal switch to turn the effect on.
(the CHECK indicator is lit).
- Set the [RATE], [DEPTH], and [RES] knobs at the center position.
- Use the [STAGE] switch to select the stage type.
- With the [RATE] knob, adjust the speed of the filter change.
* When set to MIN, the filter remains off.
- With the [DEPTH] knob, adjust the depth of the filter change.
* The filter effect stops when this is set to MIN with the [STAGE] switch set to anything besides FALL or RISE.
- With the [RES] knob, adjust the strength of the filter effect.
* Raising the RES setting (turning it clockwise) makes it easier for the sound to become distorted. If it appears that the sound is becoming distorted, try lowering the RES setting.

Setting the Tempo with the PH-3's Pedal Switch

- RATE cycles for use with the tempo settings can be made in the range of 0.2–16 seconds.
- Step on, and continue depressing the PH-3's pedal switch for at least two seconds.
If the pedal switch is pressed when the effect is on, the CHECK indicator goes out, and the effect is turned off for two seconds.
If the pedal switch is pressed when the effect is off, the CHECK indicator turns red, and the effect is turned on for two seconds.
* For switching without the normal stress and hassle of turning effects on and off, when you go into the tempo setting mode while the effect is on, the effect is first switched off for two seconds, and the PH-3 switches to tempo setting mode.

The CHECK indicator then flashes in red and green, and the tempo can then be set with the effect on.
Here, the tempo is indicated by the value set with the [RATE] knob.

- Press the PH-3's pedal switch in timing with the tempo.
The CHECK indicator then flashes in red and green in time with the tempo.
* When the pedal switch is pressed, the filter is completely lowered (except when set to RISE or FALL). When using this, even if the RATE (as shown by the flashing CHECK indicator) is off slightly from the tempo, you can match the RATE to the tempo with one step on the PH-3's pedal.

- MEMO**
- Setting the RATE near the desired tempo beforehand allows you to make faster and more natural tempo settings.
- Press and continue holding the PH-3's pedal switch for two seconds or longer to finish setting the tempo.
The effect goes on, and instead of flashing in red and green, the CHECK indicator will light steadily in red.
* When you have finished setting the tempo, the RATE changes to the value for the tempo setting made with the pedal, so the value will differ from the value indicated by the [RATE] knob.
* When changed with the [RATE] knob, the tempo is then the same as the value for the [RATE] knob.

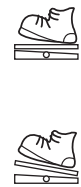
Using the EXP/CTL Jack

- When an EV-30 or FS-5U is connected to the EXP/CTL jack, the PH-3's own pedal switch then only turns the effect on and off.
- When disconnecting from the EXP/CTL jack, the RATE (tempo) settings used up to that point are cleared, with the [RATE] knob setting then becoming effective.

When Connecting the EV-30 (sold separately)

The RATE settings can be adjusted with the EV-30. You can change from the minimum RATE value set by the EV-30's Minimum Value to the value set with the PH-3's [RATE] knob.

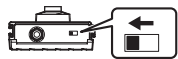
- Connect the EV-30 to the EXP/CTL jack, and press the pedal completely forward. The adjustment made with the RATE knob in this condition determines the maximum RATE value when controlled with the EV-30.
- Return (raise) the pedal completely back so the heel is down. The adjustment made with the EV-30's Minimum Value at this point determines the minimum RATE value when controlled with the EV-30.



When Connecting the FS-5U (sold separately)

The tempo can be set with the FS-5U. Concerning how to make the tempo settings, refer to steps 2 under “Setting the Tempo with the PH-3's Pedal Switch.” Simply substitute “FS-5U” where it says “PH-3's pedal switch.”

- The PH-3's pedal switch switches the effect on and off. When the effect is on, the CHECK indicator flashes alternately in red and green.
- If you turn the RATE after setting the tempo with the FS-5U, the [RATE] knob value is then adjusted.
- You can also make the tempo settings with the effect off.
- Set the polarity switch of the connected the FS-5U as shown in the figure below.



Main Specifications

Nominal Input Level	-20 dBu
Input Impedance	1 MΩ
Nominal Output Level	-20 dBu
Output Impedance	1 kΩ
Recommended Load Impedance	10 kΩ or greater
Power Supply	Alkaline battery (9 V, 6LR61) AC adaptor (PSA series; sold separately)
Current Draw	50 mA * Expected battery life under continuous use: Alkaline: 6 hours These figures will vary depending on the actual conditions of use.
Dimensions	73 (W) x 129 (D) x 59 (H) mm 2-7/8 (W) x 5-1/8 (D) x 2-3/8 (H) inches
Weight	415 g /15 oz (including battery)
Accessories	Leaflet (“USING THE UNIT SAFELY,” “IMPORTANT NOTES,” and “Information”) Alkaline battery (9 V, 6LR61)
Options (sold separately)	AC adaptor: PSA series Expression pedal: EV-30/FV-500H/FV-500L, Roland EV-5 Footswitch (momentary-type): FS-5U/FS-6/FS-7

- 0 dBu = 0.775 Vrms
- This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.